FIG. 1a

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FIG. 1b

ATGGGAGCCGGAGGACGCATGTCTGATCCAACAACGAAAGACGAACAAAAGAAGAACCCC

 M G A G G R M S D P T T K D E Q K K N P

CTCCAACGGGTGCCTTACGCAAAGCCTCCATTCACACTCGGTGACATCAAGAAGGCCATT

 L Q R V P Y A K P P F T L G D I K K A I

CCACCACACTGCTTCGAGAGATCCGTCAGCCGTTCGTTCTCCTATGTCGTTTACGATCTC

 P P H C F E R S V S R S F S Y V V Y D L

GTCATTGTTTTCCTTCTCTACTAGATTGCGAGTTCTTACTTCCATCTGCTGCCATCCCCA

 V I V F L L Y Y I A T S Y F H L L P S P

TACTGCTACCTAGCTTGGCCCATTTACTGGGGTGTACAAGGGTGCGTTTGCACCGGAATC

 Y C Y L A H P I Y H A V Q G C V C T G I

TGGGTCATTGCCCATGAATGTGGCCACCATGCATTCAGCGATTACCAGTGGCTTGACGAC

 H V I A H E C G H H A F S D Y Q H L D D

ACAGTTGGCCTCATCCTGCACTCTGCCCTGCTCGTGCCGTATTTCTCATGGAAATACAGC

 T V G L I L H S A L L V P Y F S H K Y S

CACCGCCGCCACCACTCCAACACTGGATCCCTTGAGCGTGACGAAGTCTTCGTCCCAAAG

 H R R H H S N T G S L E R D E V F V P K

CCAAAATCCAGAGTCTCGTGGTACTCCAAATACTTGAACAATCCACTTGGCAGAGTCATC

 P K S R V S H Y S K Y L N N P L G R V I

ACACTTGTGGTTACTCTTACTCTCGGTTGGCCTCTATACTTGCTGTTTAATGTCTCTGGC

 T L V V T L T L G H P L Y L L F N V S G

AGGCCTTACAACCGTTTTGCATGCCACTTTGACCCATATGGTCCAATATATAATGACCGT

 R P Y N R F A C H F D P Y G P I Y N D R

GAGAGACTTCAAATCTTCATCTCCGATGCTGGTATAATTGCTGCTGTATGTGTGTTTAT

 E R L Q I F I S D A G I I A A V C V L Y

CGTGTTGCTTTGGTCAAAGGGTTGGCTTGGCTGGTATGTGTTTATGGGGTAGCGTTACTC

 R V A L V K G L A H L V C V Y G V P L L

ATTGTCAACGGTTTCCTTGTTTTGATCACATTCCTTCAGCACACTCAGCCTTCGTTGCCG

 I V N G F L V L I T F L Q H T H P S L P

CACTATGATTCTTCCGAGTGGGACTGGCTAAGGGGAGCTCTTGCAACTGTCGACAGAGAT

 H Y D S S E W D W L R G A L A T V D R D

TATGGGGTGCTAAATAAGGTGTTCCATAACATCACAGATACGCACGTGACTCACCACTT

 Y G V L N K V F H N I T D T H V T H H L

TTCTCAACGATGCCACATTACCATGCAATGGAGGCAACTAAGGCAATCAAGCCCATACTG

 F S T M P H Y H A M E A T K A I K P I L

GGCCAGTATTATCAGTTTGATGGAACCGCGTTTTACAAGGCGATGTGGAGGGAGGCAAAG

 G Q Y Y Q F D G T P F Y K A M H R E A K

GAATGTCTGTATGTCGAGCCAGACGAGAGTACTCCAGACAAGGGTGTATTCTGGTACAAG

 E C L Y V E P D E S T P D K G V F H Y K

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FIG. 1c

AACAAGTTCTGAAGCCGAATAACATGTGGTTAGTGAAAATGGCGTCTTCTTATTTTGTCC

  N   K   F   -

TATGGAGATGGAGGAACATCATCATGTTTTGTTTTTCTTCTTATAAGATGCGTCCTTTGT

TAGTGTATTCTCTGCATGTAATAAAATAAACTTCTACCCGAAACCTTGTCTGTGCTGGTC

GGATTCTAGTTCTGCAATAAATTGTCAAGTTTAGTG
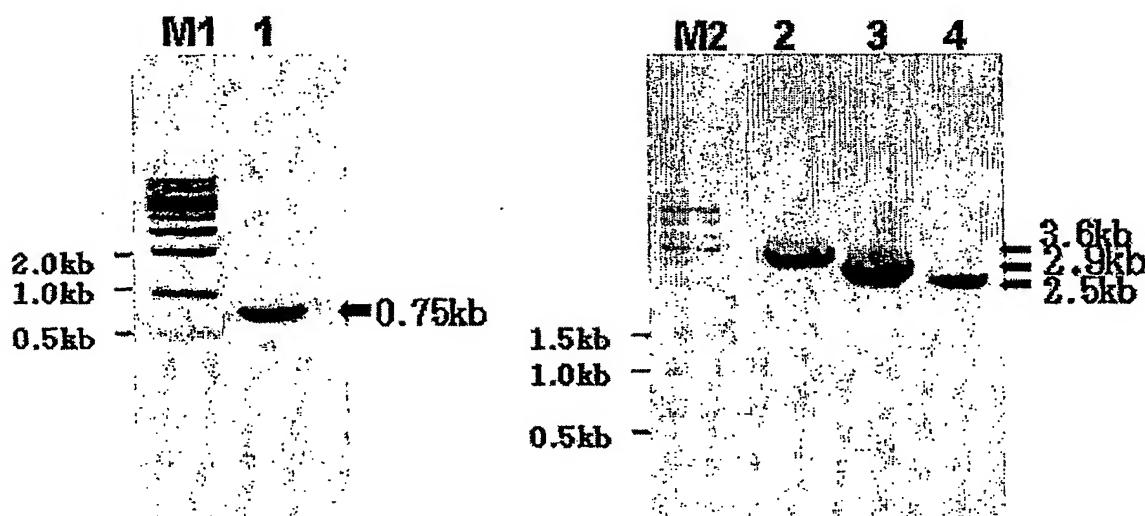
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FIG. 2a

FIG. 2b

FIG. 3

CATATGTGAAATGTAATGGAAAATGCGACAAGAATTGCAATAGAGAAAATCCAATTTGCAGAGATTA

CATGAAAAGAATTTGTACAAATAGCATATATATGTTAAAATGAAATGGGACATGCCACATTATGTGG

AATAAAAAAGACAATTTGCTTGGAATTAATTATAGAATAAATGTGTTACATTTAATATGTGATTAAT

CACTTTTTTTGAATTGTACATCTATCACATGACAAGTTCATTATATTTGACATATAATTTGTTTATG

TCTAGTCAAGCCTAATTAAATTTCTCGGAAAGCACAAAATTTTTTTGTCCTAACCAGGTTTGAACAA

CCAAACAAATCACAAAGCAGGTGTATCGCACTTGCGATGTGATCGGTCACTTTTTTCTAAATTGTACA

TCATTCACACGACAACTGTATTGTGCTCCAAGTTCAATTGAGTGCGGTTGGAGCTATAATTTCCTTG

AACACACAATGTGGAATGTGCACACTCCATGTGGGCCAATGAGCGGATGACACGTGGCGGGCAACTT

ACCTCGTTACGTTGAGGCATGCATGAAAGGGGGATCTCTTGAGGTGGAGGGGTGGGGGCGGGGGTTG

GGGGGGGGCCCCTCCTCAGACAGGTCTATATTTATGAGACCTCGTAAGGCAGAACGC
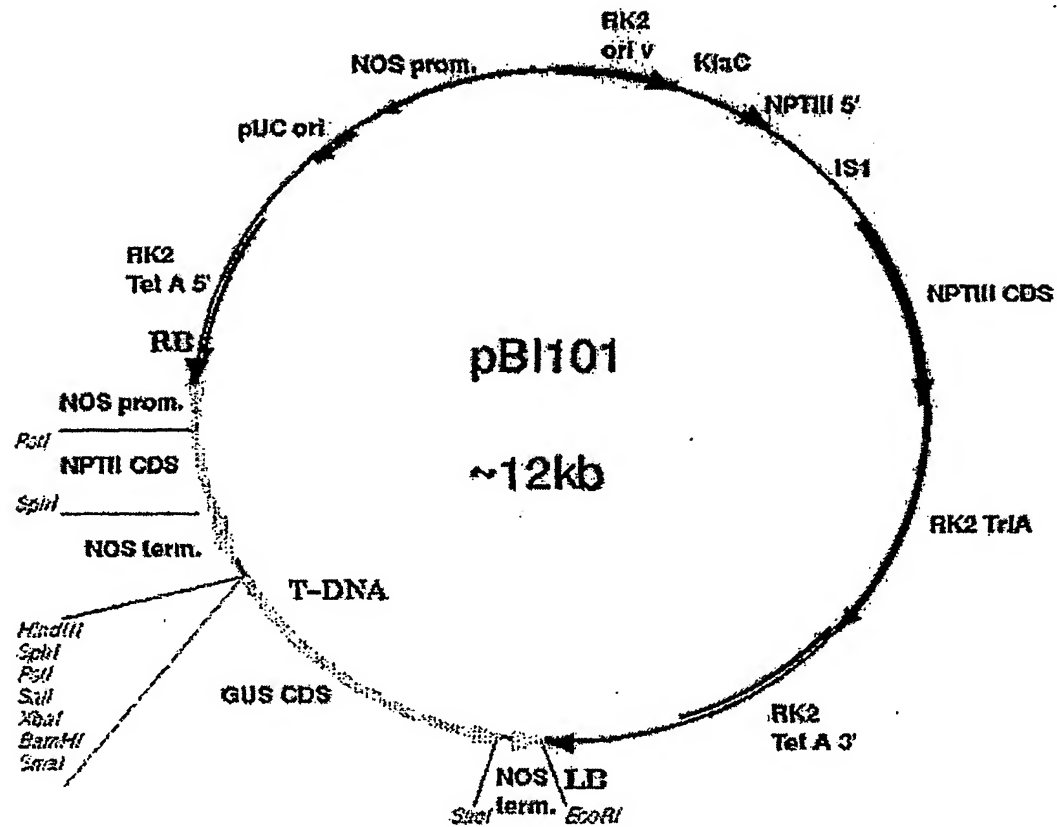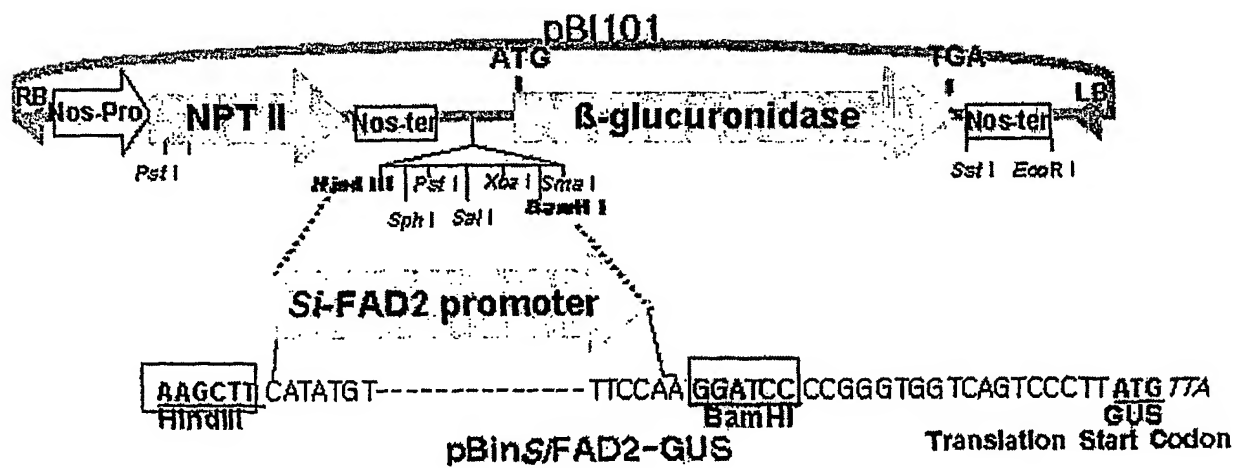
FIG. 4a

FIG. 4b

FIG. 4c

FIG. 5

FIG. 6

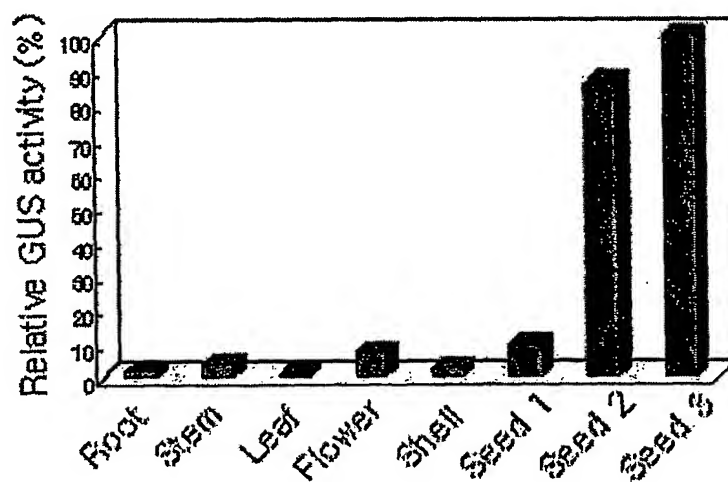## FIG. 7a

FIG. 7b

FIG. 8a

FIG. 8b

FIG. 9a

pSIW6-P2.4
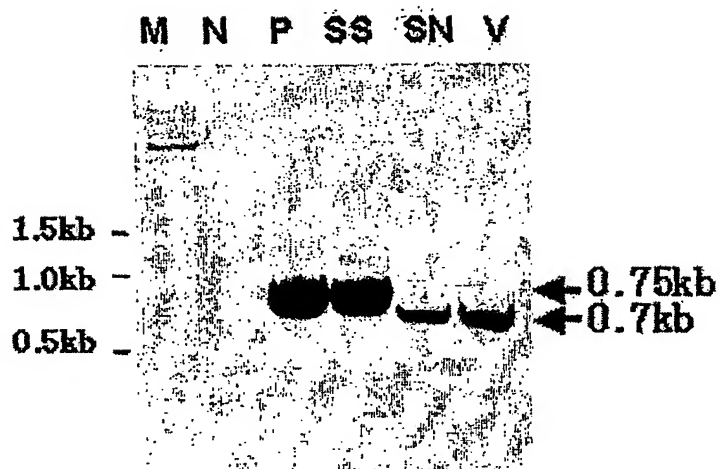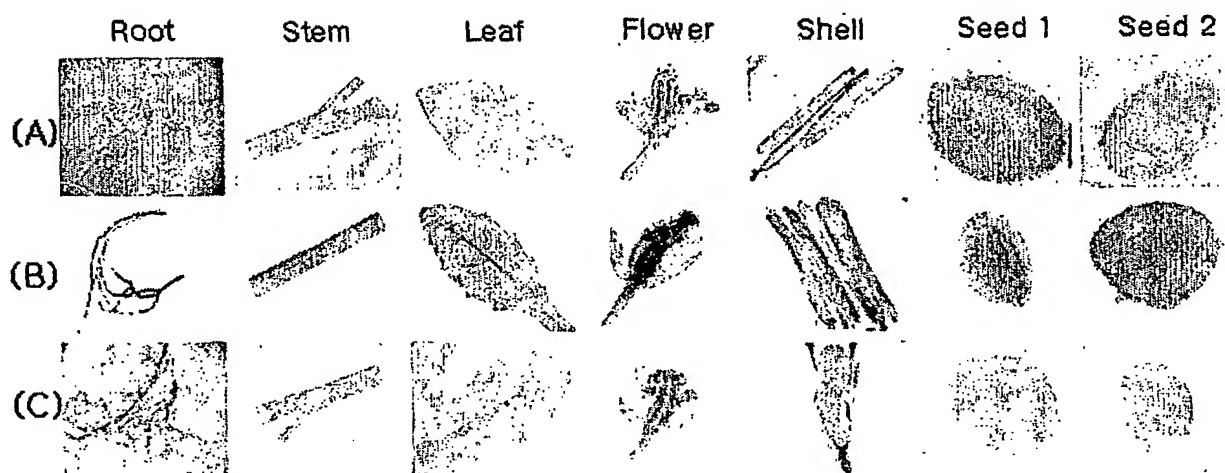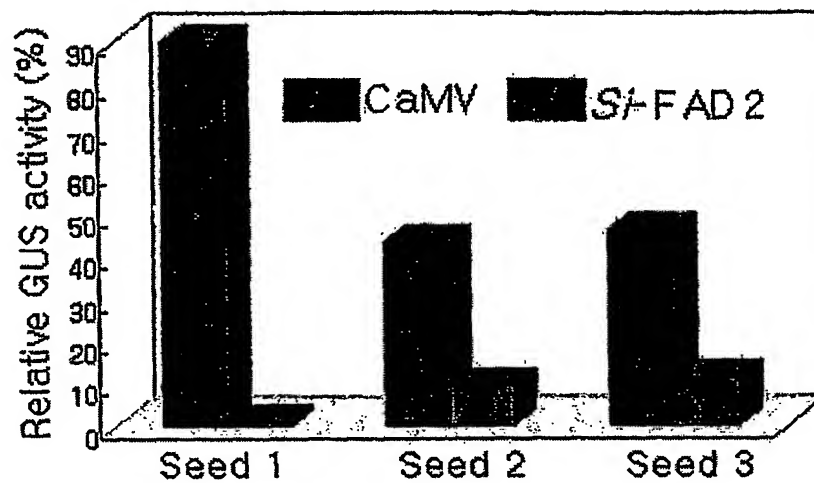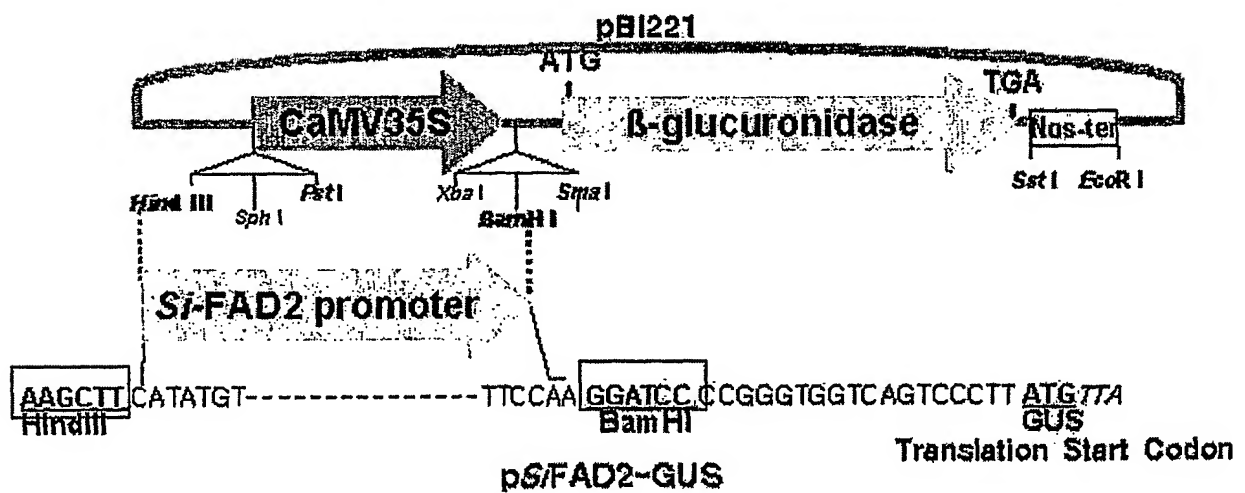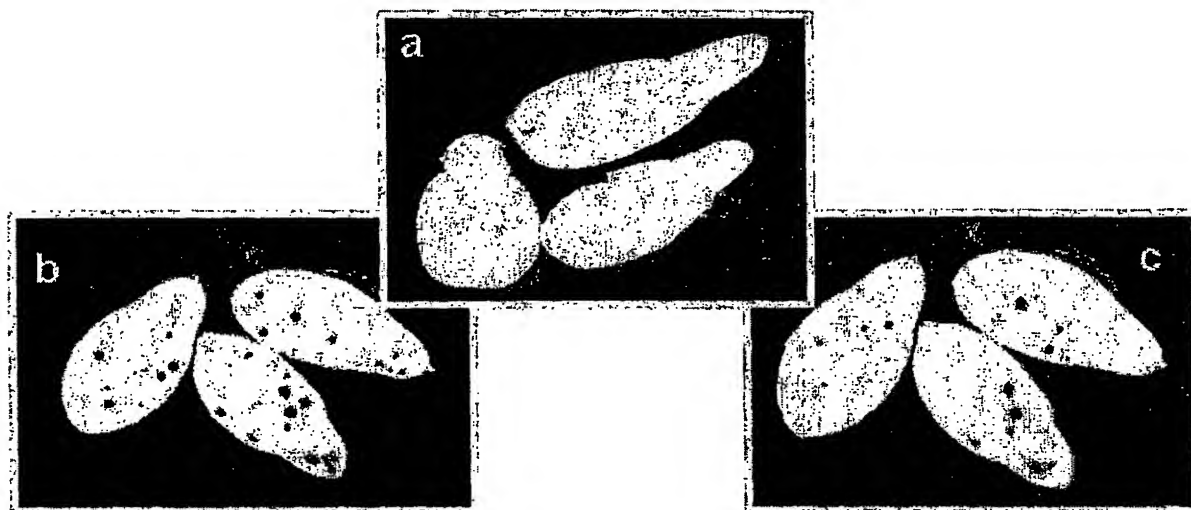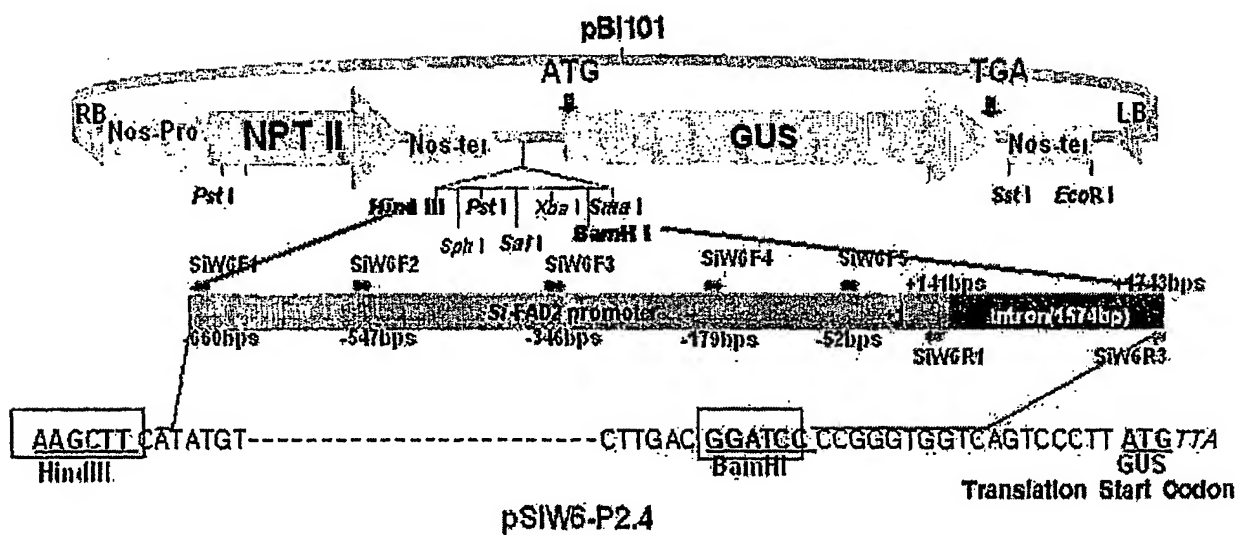
FIG. 9b
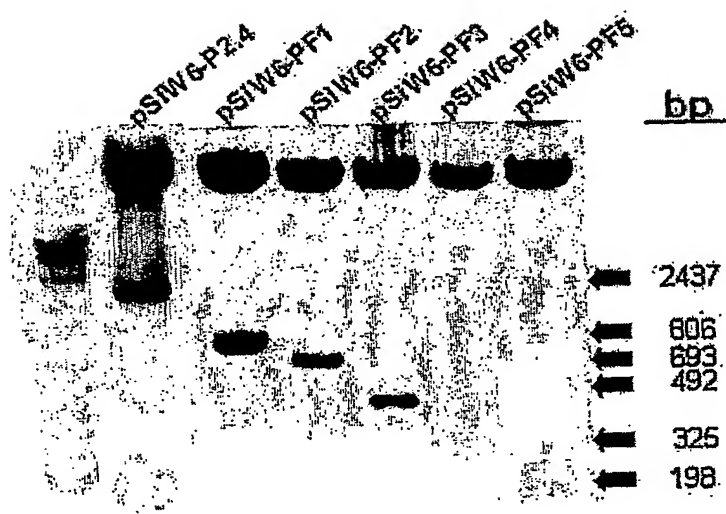
FIG. 10

FIG. 11

FIG. 12a

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FIG. 12b

SIW6F5 -52/+141 GUS 596
SIW6F4 -179/+141 GUS 1110
SIW6F3 -346/+141 GUS 1441
SIW6F2 -547/+141 GUS 1138
SIW6F1 -660/+141 GUS 1509
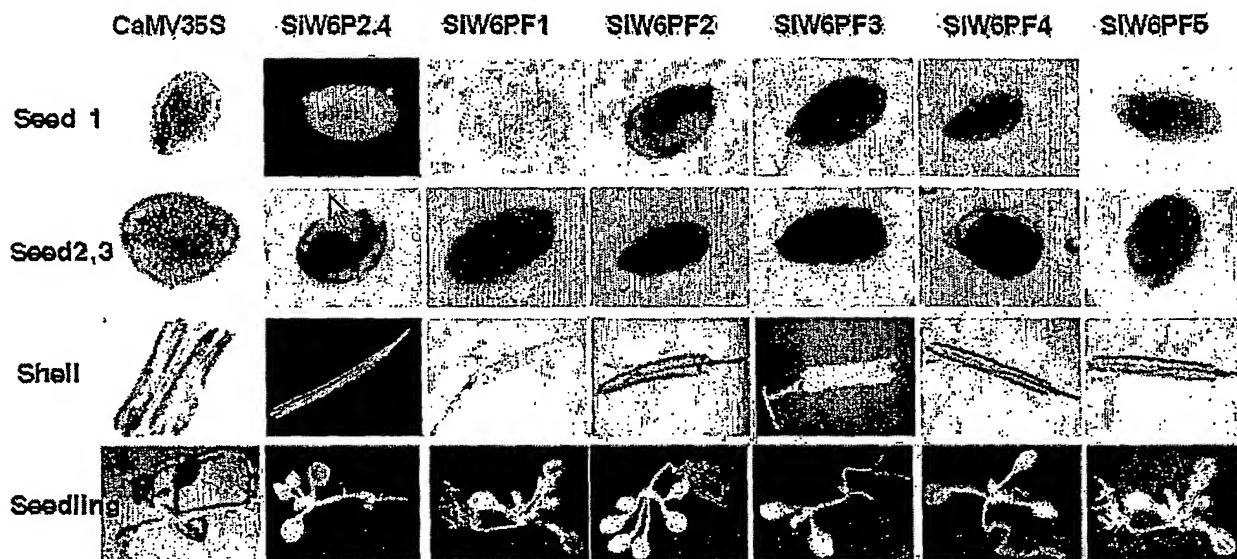SIW6P2.4 -660/+1743 GUS 96221
CaMV35S GUS 206408

GUS activity (nmol/hr/mg protein)

FIG. 13
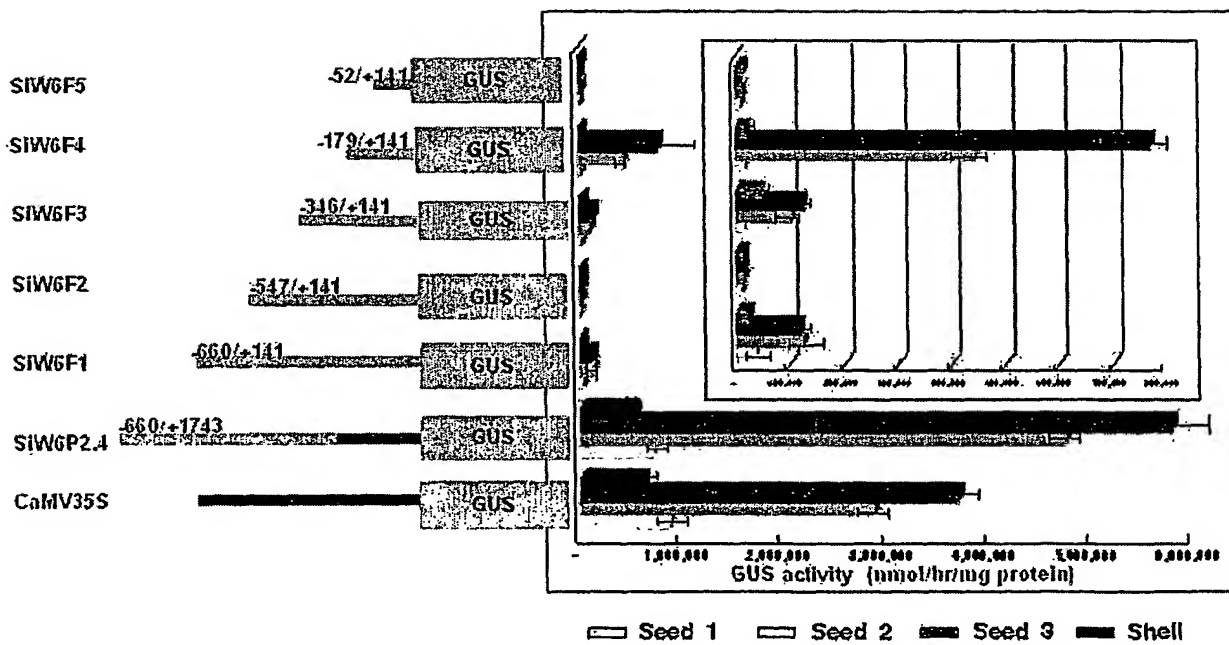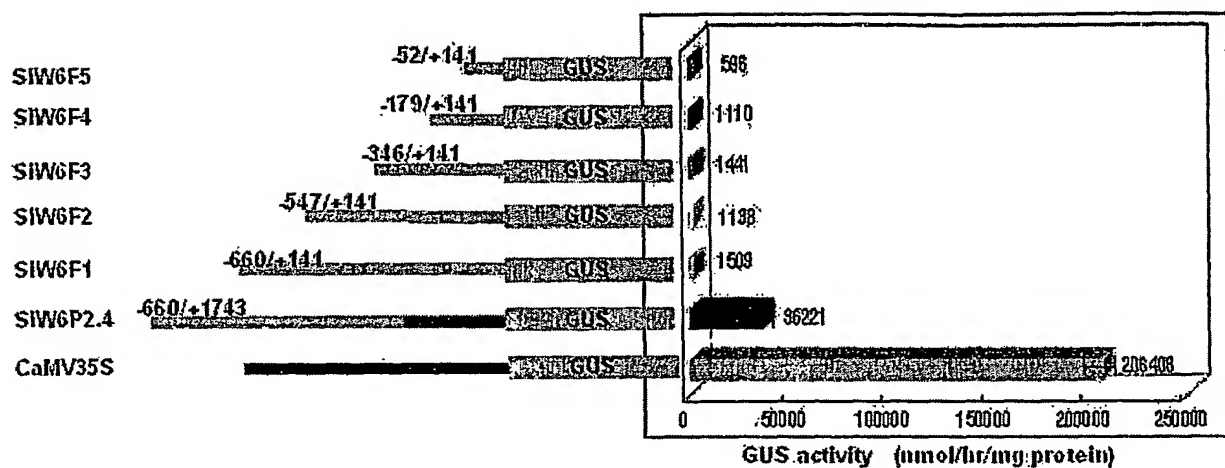
-179 GGAATGTGCACACTCCATGTGGGCCAATGAGCGGATGACACGTGGCGGG
CAACTTACCTCGTTACGTTGAGGCATGCATGAAAGGGGGATCTCTTGAGGTGGA
GGGGTGGCGGCGGGGGTTGGGGGG -53